

# ABB BALDOR RELIANCE III

---

## Customer information packet

### CFSWDM3615T-5E

5HP, 1750RPM, 3PH, 60HZ, 184TC, 3646M, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                           |
|---------------------------------------|---------------------------|
| <b>Enclosure</b>                      | TEFC                      |
| <b>Frame</b>                          | 184TC                     |
| <b>Frame Material</b>                 | Stainless Steel           |
| <b>Frequency</b>                      | 60.00 Hz                  |
| <b>Haz Area Class and Group</b>       | None                      |
| <b>Haz Area Division</b>              | Not Applicable            |
| <b>Motor Letter Type</b>              | Three Phase               |
| <b>Output @ Frequency</b>             | 5.000 HP @ 60 HZ          |
| <b>Phase</b>                          | 3                         |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ          |
| <b>Voltage @ Frequency</b>            | 575.0 V @ 60 HZ           |
| <b>Agency Approvals</b>               | NEMA PREMIUM<br>CSA<br>UR |
| <b>Ambient Temperature</b>            | 40 °C                     |
| <b>Auxiliary Box</b>                  | NO AUXILLARY BOX          |
| <b>Auxiliary Box Lead Termination</b> | None                      |
| <b>Base Indicator</b>                 | Rigid                     |
| <b>Bearing Grease Type</b>            | Polyrex EM (-20F +300F)   |
| <b>Blower</b>                         | None                      |
| <b>Current @ Voltage</b>              | 5.100 A @ 575.0 V         |
| <b>Design Code</b>                    | B                         |
| <b>Drip Cover</b>                     | No Drip Cover             |
| <b>Duty Rating</b>                    | CONT                      |
| <b>Efficiency @ 100% Load</b>         | 89.5 %                    |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated |
| <b>Feedback Device</b>                | NO FEEDBACK               |
| <b>Front Face Code</b>                | Standard                  |
| <b>Front Shaft Indicator</b>          | None                      |
| <b>Heater Indicator</b>               | No Heater                 |
| <b>High Voltage Full Load Amps</b>    | 5.1 a                     |
| <b>Insulation Class</b>               | H                         |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | M          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 36R552     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 36WGS991   |
| <b>Layout</b>       | 36LYR552   |
| <b>Eff. date</b>    | 03-12-2026 |
| <b>CD Diagram</b>   | CD0006     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 3#16       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 07-31-2017 |

|                                      |                               |
|--------------------------------------|-------------------------------|
| <b>Inverter Code</b>                 | <b>Not Inverter</b>           |
| <b>KVA Code</b>                      | <b>J</b>                      |
| <b>Lifting Lugs</b>                  | <b>Standard Lifting Lugs</b>  |
| <b>Locked Bearing Indicator</b>      | <b>Locked Bearing</b>         |
| <b>Motor Lead Exit</b>               | <b>Ko Box</b>                 |
| <b>Motor Lead Quantity/Wire Size</b> | <b>3 @ 16 AWG</b>             |
| <b>Motor Lead Termination</b>        | <b>Flying Leads</b>           |
| <b>Motor Standards</b>               | <b>NEMA</b>                   |
| <b>Motor Type</b>                    | <b>3646M</b>                  |
| <b>Mounting Arrangement</b>          | <b>F1</b>                     |
| <b>Number of Poles</b>               | <b>4</b>                      |
| <b>Overall Length</b>                | <b>18.89 IN</b>               |
| <b>Power Factor</b>                  | <b>82</b>                     |
| <b>Product Family</b>                | <b>WD All SS Encapsulated</b> |
| <b>Pulley End Bearing Type</b>       | <b>Sealed Bearing</b>         |
| <b>Pulley Face Code</b>              | <b>C-Face</b>                 |
| <b>Pulley Shaft Indicator</b>        | <b>Standard</b>               |
| <b>Rodent Screen</b>                 | <b>None</b>                   |
| <b>RoHS Status</b>                   | <b>ROHS COMPLIANT</b>         |
| <b>Service Factor</b>                | <b>1.15</b>                   |
| <b>Shaft Diameter</b>                | <b>1.125 IN</b>               |
| <b>Shaft Extension Location</b>      | <b>Pulley End</b>             |
| <b>Shaft Ground Indicator</b>        | <b>No Shaft Grounding</b>     |
| <b>Shaft Rotation</b>                | <b>Reversible</b>             |
| <b>Shaft Slinger Indicator</b>       | <b>Shaft Slinger</b>          |
| <b>Speed</b>                         | <b>1750 rpm</b>               |
| <b>Speed Code</b>                    | <b>Single Speed</b>           |
| <b>Starting Method</b>               | <b>Direct on line</b>         |
| <b>Thermal Device - Bearing</b>      | <b>None</b>                   |
| <b>Thermal Device - Winding</b>      | <b>None</b>                   |
| <b>Vibration Sensor Indicator</b>    | <b>No Vibration Sensor</b>    |
| <b>Winding Thermal 1</b>             | <b>None</b>                   |
| <b>Winding Thermal 2</b>             | <b>None</b>                   |

### Nameplate

| NP4427AAA02 |                |        |     |    |      |         |               |      |       |      |       |      |  |  |    |  |
|-------------|----------------|--------|-----|----|------|---------|---------------|------|-------|------|-------|------|--|--|----|--|
| CAT #       | CFSWDM3615T-5E |        |     |    |      |         | WGT           |      | LBS   |      |       |      |  |  |    |  |
| SPEC        | 36R552S991G1   |        |     |    |      |         | ENCL          | TEFC |       |      |       |      |  |  |    |  |
| SER #       |                |        |     |    |      |         | CC            | 010A | IP    | 69   |       |      |  |  |    |  |
| HP          | 5              |        |     |    |      | MAG CUR | 2.2           |      |       |      |       |      |  |  |    |  |
| VOLTS       | 575            |        |     |    |      |         | NEMA NOM. EFF |      |       |      |       | 89.5 |  |  |    |  |
| AMPS        | 5.1            |        |     |    |      |         |               |      | PF    | 82   |       |      |  |  |    |  |
| RATING      | 40C AMB-CONT   |        |     |    |      |         |               |      |       |      |       |      |  |  |    |  |
| RPM         | 1750           |        |     |    |      |         | MAX RPM       |      |       | 2700 |       |      |  |  |    |  |
| FRAME       | 184TC          | HZ     | 60  |    |      |         | CODE          | J    | CLASS | H    |       |      |  |  |    |  |
| SER.F.      | 1.15           | SF AMP | 5.9 |    |      |         |               | PH   | 3     | DES  | B     |      |  |  |    |  |
| DE          | 6206           |        | ODE |    | 6206 |         |               |      |       |      |       |      |  |  |    |  |
| LUBRICATION | POLYREX EM     |        |     |    |      |         |               |      |       |      |       |      |  |  |    |  |
| ID LOGO     | INVERTER TYPE  |        |     |    | VPWM |         | CHP           | 60   | TO    | 90   | 1.5:1 |      |  |  |    |  |
| ID LOGO     | WK2            | 0.428  | CT  | 15 | TO   | 60      | 4:1           |      |       |      |       |      |  |  |    |  |
| ID LOGO     | SL HZ          | 1.7    | VT  | 0- | TO   | 60      | 1000:1        |      |       |      |       |      |  |  |    |  |
|             |                |        |     |    |      |         |               |      |       |      |       |      |  |  |    |  |
|             |                |        |     |    |      |         |               |      |       |      |       |      |  |  |    |  |
|             |                |        |     |    |      |         |               |      |       |      |       |      |  |  |    |  |
|             |                |        |     |    |      |         |               |      |       |      |       |      |  |  | QR |  |
| YR          |                |        |     |    |      |         |               |      |       |      |       |      |  |  |    |  |

**Parts List**

| Part number   | Description                              | Quantity |
|---------------|------------------------------------------|----------|
| SA346218      | SA 36R552S991G1                          | 1.000 ea |
| RA334728      | RA 36R552S991G1                          | 1.000 ea |
| 36FN3000A01SP | EXFN, PLASTIC, 7.00 OD, .912 ID          | 1.000 ea |
| 35CB1017A02   | 5/36 MID SECT - 3 PC. CONDUIT BOX 3/4 N  | 1.000 ea |
| RM1070A81     | O-RING, -043 VITON/FKM .070CS X 3.489ID  | 1.000 ea |
| HA3424S48     | STUD - M6X1.0 THDS X 3.00"               | 1.000 ea |
| 11XW1032G08   | 10-32 X .50, TAPTITE II, HEX WSHR SLTD U | 1.000 ea |
| HW3001B01     | BRASS CUP WASHER, FOR #10 SCREW          | 1.000 ea |
| 36EP1920A02   | FREP TEFC 206 BRG WD11/12 (STAINLESS)    | 1.000 ea |
| RM1070A42     | O-RING,(#70-7.239) FLOUROELASTOMER COMPO | 1.000 ea |
| HW4600G02     | 30 X 47 X 8 LIP SEAL, GRAPHITE INFUSED V | 1.000 ea |
| HW4600F25     | 30 X 48 X 4.5 AFX SEAL, GRAPHITE INFUSED | 1.000 ea |
| HW4500S33     | 1/8 NPT STAINLESS #304 SS PLUG           | 4.000 ea |
| HW4500S33     | 1/8 NPT STAINLESS #304 SS PLUG           | 4.000 ea |
| HW5100A06     | W2420-025 WVY WSHR (WB)                  | 1.000 ea |
| 36EP1925A02   | PUEP 182-4TC ENCL 206 BRG WD11/12 STAINL | 1.000 ea |
| RM1070A42     | O-RING,(#70-7.239) FLOUROELASTOMER COMPO | 1.000 ea |
| HW4600G02     | 30 X 47 X 8 LIP SEAL, GRAPHITE INFUSED V | 1.000 ea |
| HW4600F25     | 30 X 48 X 4.5 AFX SEAL, GRAPHITE INFUSED | 1.000 ea |
| RM1070A14     | O-RING, -010 VITON/FKM .070CS X .239ID   | 4.000 ea |
| 11XB1214S16   | 12-14X1.00 HXWSSLD TYP B STAINLESS       | 1.000 ea |
| 36FH4007      | FAN COVER #304 STAINLESS W/OUT GREASER   | 1.000 ea |
| 10XN1032FS06  | HEX HD CAP SCREW 10-32 X 3/8 SS FOOD SAF | 3.000 ea |
| 35CB1513A01   | 35-36-37 MACH. LID - 3 PC. CONDUIT BOX   | 1.000 ea |
| RM1070A81     | O-RING, -043 VITON/FKM .070CS X 3.489ID  | 1.000 ea |
| HW2502E16     | #303 SS,SQ KEY 1/4 X 1.750               | 1.000 ea |
| HA7000A02     | KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA  | 1.000 ea |
| MJ5001A27     | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL  | 0.005 qt |
| MJ5004A93     | FOOD GRADE (H1 RATED) ANTISEIZE THRD COM | 0.005 ea |
| HA1025A21     | WSHR,FELT .125" THK                      | 1.000 ea |
| HA5027A09     | DRAIN KIT,(2)HA4002A03 BAGGED W/LABEL    | 1.000 ea |

|            |                                         |          |
|------------|-----------------------------------------|----------|
| MJ1000A02  | GREASE, POLYREX EM EXXON                | 0.050 lb |
| WD5603A02  | KIT, CLOSED-END LEAD SPLICE (18-14GA)   | 1.000 ea |
| HA3101FS55 | THRUBOLT, 1/4-20 X 13.250 SS FOOD SAFE  | 4.000 ea |
| GOPA1000   | PKG GRP, PRINT PK1026A06                | 1.000 ea |
| MN416A01   | TAG-INSTAL-MAINT no wire (2500 bx)11/25 | 1.000 ea |
| FE-0000016 | ZTRG FE ASSEMBLY                        | 1.000 ea |
| PE-0000010 | ZRTG PE ASSEMBLY                        | 1.000 ea |

**AC Induction Motor Performance Data**

Record # 39204

Typical performance - not guaranteed values

| Winding: 36WGS991-R001 |    |       | Type: 3646M                           |                     | Enclosure: TEFC           |            |              |
|------------------------|----|-------|---------------------------------------|---------------------|---------------------------|------------|--------------|
| Nameplate Data         |    |       | 575 V, 60 Hz:<br>Single Voltage Motor |                     |                           |            |              |
| Rated Output (HP)      |    | 5     | Full Load Torque                      |                     | 15.2 LB-FT                |            |              |
| Volts                  |    | 575   | Start Configuration                   |                     | direct on line            |            |              |
| Full Load Amps         |    | 5.1   | Breakdown Torque                      |                     | 47.6 LB-FT                |            |              |
| R.P.M.                 |    | 1750  | Pull-up Torque                        |                     | 26.4 LB-FT                |            |              |
| Hz                     | 60 | Phase | 3                                     | Locked-rotor Torque |                           | 30.8 LB-FT |              |
| NEMA Design Code       |    | B     | KVA Code                              | J                   | Starting Current          |            | 36.9 A       |
| Service Factor (S.F.)  |    | 1.15  | No-load Current                       |                     | 2.2 A                     |            |              |
| NEMA Nom. Eff.         |    | 89.5  | Power Factor                          | 82                  | Line-line Res. @ 25°C     |            | 3.73 Ω       |
| Rating - Duty          |    | 40C   | AMB-CONT                              |                     | Temp. Rise @ Rated Load   |            | 87°C         |
| S.F. Amps              |    |       |                                       |                     | Temp. Rise @ S.F. Load    |            | 108°C        |
|                        |    |       |                                       |                     | Locked-rotor Power Factor |            | 39           |
|                        |    |       |                                       |                     | Rotor inertia             |            | 0.428 LB-FT2 |

**Load Characteristics 575 V, 60 Hz, 5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 44   | 66   | 77   | 82   | 84   | 84   | 83   |
| Efficiency      | 87.1 | 90.7 | 90.8 | 89.9 | 88.2 | 86.3 | 88.9 |
| Speed           | 1788 | 1775 | 1762 | 1746 | 1730 | 1711 | 1736 |
| Line amperes    | 2.5  | 3.18 | 4.08 | 5.14 | 6.38 | 7.74 | 5.88 |

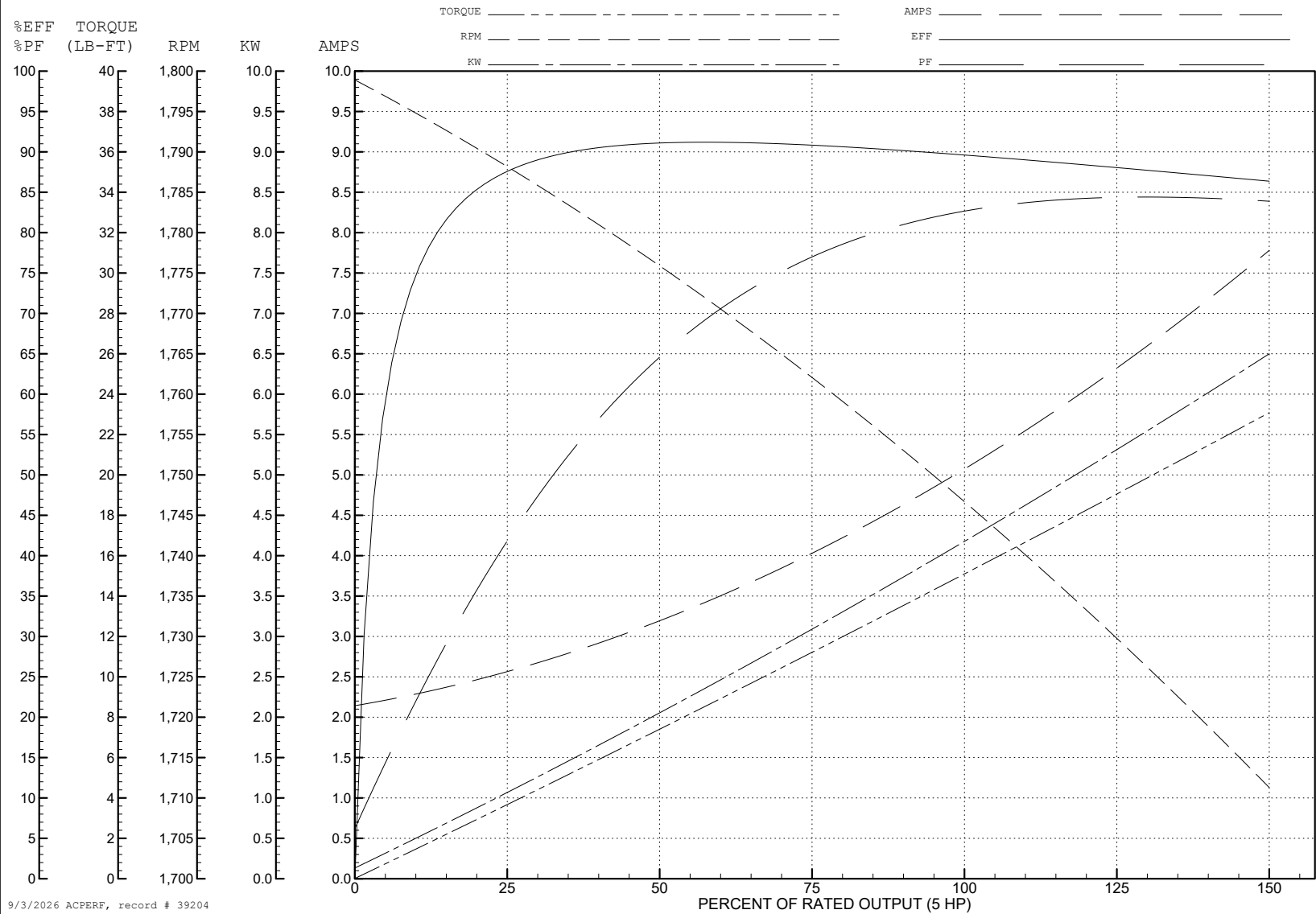
ABB Motors and Mechanical Inc.

WINDING # 36WGS991

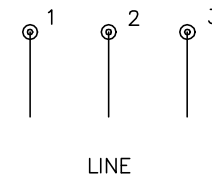
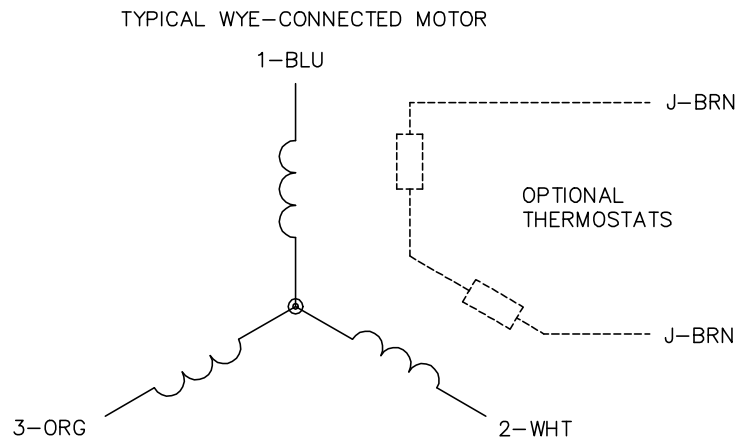
Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 575 V 3646M

TORQUES (LB-FT) : PO=47.6 PU=26.4 LR=30.8 LRA=36.9



CD0006


**NOTES:**

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: -


**BALDOR - RELIANCE®**

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1